UNIVERSITAS BINA NUSANTARA

School of Computer Science

Teknik Informatika – Matematika

Skripsi Sarjana Program Ganda

Semester Genap 2013/2014

ANALISIS DAN PERANCANGAN PROGRAM PENGAMBILAN KEPUTUSAN PEMILIHAN JENIS PATI SINGKONG SEBAGAI BAHAN BAKU *EDIBLE* FILM MENGGUNAKAN METODE *WEIGHTED PRODUCT* DAN *SIMPLE ADDITIVE WEIGHTING* BERBASIS PHP

Dedi Dermawan 1100060764

ABSTRAK

Perkembangan teknologi mempengaruhi variasi bentuk dan teknologi pengemasan sebagai salah satu cara melindungi dan memperpanjang umur simpan hasil makanan. Kini, penggunaan plastik sebagai bahan kemasan meningkat. Faktanya, kemasan sintetik ini justru dapat merusak kesehatan dan lingkungan. Karena itu, digunakanlah *edible* film sebagai kemasan alternatif. *Edible* film dibuat dari komponen berbahan dasar polisakarida pati sehingga pemanfaatan pati singkong berpotensi menghemat biaya produksi. Untuk mendapatkan pati singkong yang maksimal itu sendiri, perlu adanya pemilihan jenis singkong unggul yang menghasilkan pati terbanyak. Pemilihan jenis pati didasari dari usia panen, hasil panen serta kadar patinya sendiri. Untuk masalah m*ulti attribute decision making*, maka digunakan dua metode *simple additive weight* dan metode *weighted product* guna mendapatkan hasil yang terbaik. Perancangan program akan menggunakan bahasa pemrograman PHP yang umum.

Kata kunci: *Edible* Film, Pati Singkong, *Simple Additive Weight*, *Weighted Product*, *Multi Attribute Decision Making*, PHP.

UNIVERSITAS BINA NUSANTARA

School of Computer Science

Teknik Informatika – Matematika

Skripsi Sarjana Program Ganda

Semester Genap 2013/2014

ANALYSIS AND PROGRAM DESIGN FOR DECISION MAKING OF CASSAVA STARCH SELECTION AS RAW MATERIAL OF EDIBLE FILM USING WEIGHTED PRODUCT AND SIMPLE ADDITIVE METHOD BASED ON PHP

Dedi Dermawan 1100060764

ABSTRACT

Technological developments affecting the variation of the shape and packaging technology as a way to protect and extend the shelf life of food results. Now, the use of plastic as a packaging material increases. In fact, this synthetic packaging can actually damage health and the environment. Therefore, the edible film is used as an alternative packaging. Edible films made from starch polysaccharide component-based so cassava starch utilization has the potential to save on production costs. To get the maximum cassava starch itself, the need for the selection of superior varieties of cassava starch which produces the most. The selection is based on the type of starch age harvest, the crop and the starch content of its own. For the problem of multi-attribute decision making, the use of two simple additive weight method and the weighted product method in order to obtain the best results. The design of the program will use a common programming language PHP.

Keywords: *Edible Films, Cassava Starch, Simple Additive Weight, Weighted Product, Multi Attribute Decision Making, PHP.*